

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An emergency brake system for a vehicle comprising:
 - a first brake means for braking the rotation of a wheel;[[,]]
 - a second brake means for braking the vehicle by increasing frictional resistance with a road surface;[[,]]
 - an obstacle detector means for detecting an obstacle existing in an advancing direction of the vehicle;[[, and]]
 - a vehicle speed and deceleration detector for detecting the speed and deceleration of the vehicle;
 - a hard braking detector for detecting the actuation of hard braking by said first brake or actuation requirements for hard braking by a driver; and
 - a controller collision determination means for determining whether or not the vehicle is going to crash into the an obstacle detected by said obstacle detector means based on the speed and deceleration detected by said [[a]] vehicle speed and deceleration detector means, after the actuation of hard braking or the actuation requirements have been detected by said hard braking detector;
 - wherein said second brake is actuated if said controller when it is determined determines that the vehicle is going to crash into the obstacle detected by said

~~obstacle detector by said collision determination means, said second brake means is actuated.~~

2. (Canceled).

3. (Currently Amended) An emergency brake system for a vehicle as claimed in claim 1 further comprising a hard braking booster ~~means~~ for automatically boosting hard braking carried out by a driver through said first brake ~~means~~, wherein if it is determined that the vehicle is ~~crashing going to crash~~ into an obstacle by said controller collision determination means, said hard braking booster ~~means~~ is actuated, and if it is determined that the vehicle is still going to crash into the obstacle ~~after actuation of the hard braking booster~~, said second brake ~~means~~ is actuated.

4. (Currently Amended) An emergency brake system for a vehicle as claimed in claim 1 wherein said second brake ~~means~~ comprises a plurality of different types of ~~brakes~~ brake ~~means~~, wherein a road surface condition detector ~~means~~ for detecting the condition of a road surface is provided, and wherein according to the road surface condition detected by the road surface condition detector ~~means~~, said second brake ~~means~~ is selected from among the plurality of different types of ~~brakes~~ brake ~~means~~.

5. (Currently Amended) An emergency brake system for a vehicle as claimed in claim 2 wherein after the second brake ~~means~~ have been actuated, if

hard braking by said first brake ~~means~~ is not actuated, and determination by said controller ~~collision-determination-means~~ is made that crashing of the vehicle into the obstacle will be avoided or if determination is made that the vehicle is at a stop, actuation of said second brake ~~means~~ is stopped.

6. (Currently Amended) An emergency brake system for a vehicle as claimed in claim 2 wherein an alarm sound is produced when said second brake ~~means~~ is actuated.